


# Farm Business Resilience Program

<p><b>Case Study Title:</b></p>	<p>Albert Valley Turf: 'Playing the Night Game' a simple and effective water plan for the future</p>
<p><b>Case Situation:</b></p>	<p>Paul Baxter – Albert Valley Turf                      50-60 Karen Court                      Tamborine Scenic Rim QLD 4270                      Turf Grower 20 acres</p> <p>Albert Valley Turf started operations in 1990 as a dedicated landscaping operation and diversified into turf supply as the business grew. The turf farm is located beside the Albert River in South-East Queensland, with growing conditions that allow them to grow all their varieties of turf all year round.</p> 
<p><b>Context:</b></p>	<p><i>What was the problem, incentive or trigger to participate in the program – eg drought mitigation, need to update business plan?</i></p> <p>Paul and Barry at Albert Valley love what they do and want to continue their business for years to come. They realised that in order to do so, they needed to adopt improved methods of farming to reduce the need for increased physical activity and provide a sounder business model that reduced the reliance on imported product to be more sustainable.</p> <p><i>Describe the need to implement a new solution to drought, etc. You could use information provided in the growers' QRIDA application on drought mitigation goals and list of project/s.</i></p> <p>Whilst developing their Farm Business Resilience plan, Paul and Barry have identified and achieved many of their goals including the procurement of a new harvester to increase their economic resilience, an erosion project and increased dam storage to support flood preparedness. Albert Valley Turf have successfully applied and received 2 assistance packages from QRIDA with another 2 applications planned.</p> <p>One of the key items to apply a new solution to drought that Paul and Barry identified in their plan was an improved approach and infrastructure to irrigation. It sought to increase water storage capacity and implement underground 3Phase power to reduce the risk of flood impacts and introduce <b>night irrigation</b> to support increased drought resilience by using less power and water</p>

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<p><b>Link to project:</b></p>	<p><i>What professional or technical advice contributed to creating the Plan and implementing new practices/technology?</i></p> <p>Paul and Barry conducted extensive research into power and pump conversions along with irrigation tariffs and evaporation rates, they then started to plan out a change to the operation. They engaged in the support of Moshie (Chris Mason) to help them develop a plan to capture their goals and ideas, timelines and measures and helped them list out the step changes to breathe life into the project goals.</p>
<p><b>Summary on Benefits:</b></p>	<p><i>A very brief technical summary of the need behind the product/tool/information and what potential benefits could be expected from its use eg new irrigation system, new dam, centre pivot. Add a picture of the new infrastructure.</i></p> <p>Albert Valley will introduce a new irrigation infrastructure and mode of operation by installing 3 phase power underground to a new portable pump. The projected benefits are a reduction in diesel use and spend, Power saving by irrigating at night, increased flood preparedness with underground power and pump mobility and water saving under night regime.</p>
<p><b>Changes made or planned; Adoption, costs of change:</b></p>	<p><i>Describe the steps planned, made or process taken to make the change, participate in the program.</i></p> <p>Project steps:</p> <ul style="list-style-type: none"> <li>▪ Map out new infrastructure needs</li> <li>▪ Obtain quotes (new power breakers, power line, pump etc)</li> <li>▪ Install new Power pole with new breakers</li> <li>▪ Create trench and lay power</li> <li>▪ Purchase and install new electric pump</li> <li>▪ Purchase new filter</li> <li>▪ Apply for QRIDA assistance to support project</li> <li>▪ Commence Night irrigation regime</li> <li>▪ Track energy and water savings</li> </ul> <p><i>What worked really well or could work during implementation process?</i></p> <p>Trade readiness to undertake project works</p> <p><i>What are the key issues (if any) and how were they overcome?</i></p> <p>Weather, timing to execute works, importing of irrigator</p> <p><i>What is/was the economic, social and environmental cost of implementation?</i></p> <p><b>Economic cost of implementation has been calculated at \$96,000</b></p> <p><b>No real Social and environmental costs (only benefits)</b></p>

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<p><b>Impact and Benefits:</b></p>	<p><i>What impacts or benefits have been noticed so far, and expected to be seen in the future? And for who: Discuss those relevant from the below list and clarify figures/timelines around benefits, what were immediate, what are longer term?</i></p> <ul style="list-style-type: none"> <li>• Productivity (eg improved crop quality/quantity, crop resilience, etc)</li> <li>• Profitability (include figures)</li> <li>• Social (eg benefits around better wellbeing, improved workload, etc)</li> <li>• Environmental (eg water saving, soil improvements, water quality)</li> <li>• Any unexpected benefits / issues?</li> </ul> <p>Below is a summary of timelines and projected success measures relating to the Albert Valley Turf 3-Phase Power irrigation project -</p> <p><b>Timeline:</b> commence Dec 2023</p> <ul style="list-style-type: none"> <li>▪ Request updated quotes             <ul style="list-style-type: none"> <li>○ MS1 – 3 phase power installation</li> <li>○ MS2 – 3 phase pump/trailer and covered gear box</li> <li>○ MS3 – New portable irrigator and filter</li> </ul> </li> <li>▪ Submit assistance application to QRIDA (DPG)</li> </ul> <p><b>Success Measures</b> - Night Irrigation &amp; 3-phase Power measures (drought and flood resilience)</p> <ul style="list-style-type: none"> <li>▪ Diesel &amp; petrol saving – annual spend \$24K</li> <li>▪ Electricity Saving – Night rate Tariff 62 (cheaper farm rate – review in 12 months)</li> <li>▪ Increased Flood preparedness (System breakers, mobile pump)             <ul style="list-style-type: none"> <li>○ Pump mobile – only have to disconnect 1 pump</li> <li>○ Disconnect board (reverse plan)</li> </ul> </li> <li>▪ Water saving (less evaporation) – projected reduction 30% usage             <ul style="list-style-type: none"> <li>○ Current yearly irrigation 39M litres</li> <li>○ Night irrigation program - yearly irrigation requirement will be 27M litres</li> <li>○ Saving of <b>12M litres</b> of water per year</li> </ul> </li> </ul> <p><i>Has the thinking / success or learnings influenced any future business / on-ground decision making? Why or why not?</i></p> <p>Project still in implementation phase – key learnings to be realised in future</p> <p>Having already successfully applied for some QRIDA loan and assistance programs had a positive influence.</p>
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<b>Relevance to others:</b>	<p><i>What advice would be given to others thinking about using this tool or implementing this practice change? (Look for practical ideas and why they think it would be relevant for others)</i></p> <p>Do your own homework and know what you want to achieve (suppliers, Tariffs, infrastructure, comparisons of fossil fuels to Electrical, time savings vs costs and environmental impacts)</p>
<b>Resources:</b>	<p><i>[Add Website links, social media links or details of resources. Insert photos at appropriate sites in the case study]</i></p> <p>Moshie Enterprise coaching and development professional advice/support) <a href="https://moshie.com.au/">https://moshie.com.au/</a></p> <p>Pump Service Industries, Jimboomba QLD (pump and fittings)</p> <p>Enever Electrical, Park Ridge South QLD (power and excavation)</p> <p>Total Water Services, Browns Plains QLD (irrigator and filter)</p>

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